



THOMAS G. NEWMAN,
EDITOR.

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Sweet Clover has another credit mark. Mr. C. F. Muth, who has kept bees for many years, says that this season is the first time that his bees ever gathered much honey in July. He says that it is all owing to the sweet clover growing profusely on the surrounding hills.

As there is another firm in Chicago by the name of "Newman & Son," we wish our correspondents would write "American Bee Journal" on the envelope when writing to this office. Several letters of ours have already gone to the other firm (a commission house), causing vexatious delay and trouble.

We have made arrangements by which we can supply the Weekly *AMERICAN BEE JOURNAL* and the Monthly *Bee-Keepers' Magazine* for 1887, both periodicals for the very small price of \$1.25, or the above and *Gleanings* for \$2. Three bee-periodicals for the usual price of one!

Married, on Wednesday evening, Sept. 1886, at the residence of the bride's mother, at Wilmette, Ill., by Rev. J. D. Leek, Miss Sallie A. Ward and Mr. George W. York, (an employee at the office of the *BEE JOURNAL*, and who is known to many visitors at this office.) Our congratulations are extended to the happy pair, and we hope they will never regret this important event of a lifetime.

Badges for the Indianapolis Convention.—The Corresponding Secretary of the North American Bee-Keepers' Society (Mrs. Robbins) is getting up a very pleasant surprise to those attending the convention at Indianapolis, in the way of badges. With the good taste Mrs. Robbins has always displayed in such matters, it will, no doubt, be a badge of which we shall all be proud, and carry to our homes as a beautiful memento of our visit to Indianapolis.

Colored Posters for putting up over honey exhibits at Fairs are quite attractive, as well as useful. We have prepared some for the *BEE JOURNAL*, and will send two or more free of cost to any one who will use them, and try to get up a club.

Among the Many scores of visitors at the office of the *AMERICAN BEE JOURNAL* during the past week, the most distinguished visitor was Mr. J. S. Harbison, of San Diego, Calif. Mr. Harbison is one of the pioneers of modern bee-culture, and figured quite largely in the bee-literature of a quarter of a century ago. He is the author of a bee-book, inventor of a hive and sectional frames for comb honey, as used on the Pacific Coast, and generally called "California frames." He is the most extensive bee-keeper in the world, owning from 3,000 to 3,500 colonies of bees, in many apiaries, and is noted for having the largest honey crop of any producer in the world. Next to Mr. Harbison comes Capt. J. R. Hetherington, of Cherry Valley, N. Y., who has about 2,000 colonies of bees. Strange to say that within half-an-hour after our distinguished visitor left, in walked Mr. O. J. Hetherington, of East Saginaw, Mich., brother to the Captain just mentioned.

We had an excellent visit with these gentlemen, as we did with many others who called on us, which space forbids our mentioning in detail, at this time.

Round Trip Tickets to the Convention.—As Manager of the National Bee-Keepers' Union, we have made arrangements with the Indianapolis lines of railroad for round trip tickets from Chicago to Indianapolis and return to Chicago, good from Monday to Saturday, Oct. 11 to 16, 1886, for \$7.30. The fare one way is \$5.50, and this is one fare and one-third. To obtain these tickets, it will be necessary to get a certificate signed by Thomas G. Newman, stating that the bearer is entitled to the reduced fare. Now, do not wait until you come to Chicago to get this certificate, for we may have gone before you come. Send for the certificate at once; and it will be sent by return mail.

Red Clover Honey.—Quite a number have reported that this year their bees have gathered honey from red clover. Mrs. L. Harrison accounts for it thus in the *Prairie Farmer*: "In consequence of the drouth the clover heads grow small, and the tubes of the flowerets are short. This enables the bees to reach the nectar. There have been many conflicting reports, with reference to the utility of the red clover as a honey plant, but it is apparent that when the conditions are favorable for the production of small heads, either by reason of the soil or lack of moisture, Italian bees can reach the nectar."

The Publishers of the American Agriculturist, 751 Broadway, New York, will forward a copy free to every person who has been a subscriber to it, but is not now one (provided they send their name on a postal card), to the end that they may see the great improvements that have been made in that periodical. We club it and the *AMERICAN BEE JOURNAL* for \$2.25 per year.

Frank Cheshire's new book on Bees and Bee-Keeping, can be had at this office.—Vol. I, bound in cloth, \$2.50, postpaid.

Stands at the Head.—The *Bee-Keepers' Magazine* says that sweet clover stands at the head of the list of honey-plants, and adds: "We know by personal observation the following facts in its favor, viz: The number of bees on it per square foot of clover is equal to the basswood when in full bloom. The length of bloom is greater than any other honey-plant we know of. The honey from it is of beautiful light color. It will secrete in the driest, hottest, or rainiest seasons, and will thrive on almost any land. Rain does not wash the nectar from the flower. It secretes from daylight till dark. It is not hard to eradicate it from the soil when required."

The Bee, says an enthusiast, does not deface your fields by clipping the growing grasses, like the domestic animals; it does not mar the garden plants or levy taxes on your grain. Bees differ from the whole insect world. No tree, shrub, plant or flower is injured by their presence. He might have added that without the presence of bees many of the plants would soon cease to bloom, and even cease to live. Bees are the best friends of horticulturists and fruit-growers.

Linden Honey is the name by which what has heretofore been called "basswood honey," is hereafter to be known in Canada. This has been decided by a committee appointed to consider the question of an appropriate name for that nectar. Now let it be also called by the same name in the United States. It is appropriate and much more euphonious.

To Indianapolis there are four routes from Chicago—the Kankakee, leaving at 9.10 a.m. and 8.00 p.m.; the Monon, 6.05 a.m. and 7.30 p.m.; the Pan Handle, 8.30 a.m. and 8.30 p.m.; and the Chicago and Eastern Illinois, at 8.00 a.m. and 8 p.m. every day. On all of these railroads the reduced rates for a round trip for \$7.00 can be had upon the presentation of a certificate signed by Thomas G. Newman. We wish it to be distinctly understood that we have not been able to secure rates for any other points—only a round trip from Chicago to Indianapolis and return to Chicago. Several have written to us to get them reduced rates on other routes, and from other points—and we should be glad to do so, but have not been able to do it. We make this announcement to save correspondence on the subject. The tickets are good from Monday to Saturday, Oct. 11 to 16, 1886.

National Bee-Keepers' Union.—There will be a meeting of the officers and members of this Society at Indianapolis, Ind., on Wednesday, Oct. 13, 1886, at an hour to be announced at the meeting of the North American Bee-Keepers' Society, to consider business of importance.

THOMAS G. NEWMAN,
General Manager.

To give away a copy of "Honey as Food and Medicine" to every one who buys a package of honey, will sell almost any quantity of it.



AND

Replies by Prominent Apiarists.

[It is useless to ask for answers to Queries in this Department in less time than one month. They have to wait their turn, be put in type, and sent in about a dozen at a time to each of those who answer them; get them returned, and then find space for them in the JOURNAL. If you are in a "hurry" for replies, do not ask for them to be inserted here.—ED.]

Uniform Temperature in Hives.

Query, No. 310.—Is there any practical method by which practical uniformity of temperature can be maintained within a hive in the winter season, when wintering on the summer stands? If so, what is that method?—R.

No.—DADANT & SON.

I do not know of any.—G. M. DOOLITTLE.

I doubt it.—C. C. MILLER.

I know of nothing better than surrounding the hive with non-conductors of heat.—W. Z. HUTCHINSON.

Just the right kind and right quantity of "packing" might accomplish it.—JAMES HEDDON.

It is a question. Of course thick packing comes the nearest to it.—A. J. COOK.

Mathematically, no; but sufficient "practical uniformity of temperature can be maintained" by judicious and proper packing to answer all practical purposes for successful wintering.—J. P. H. BROWN.

1. I do not know of any. 2. A large colony well protected from the winds, with some absorbent on the tops of the frames that will allow moisture to pass off, and the heat to be retained.—J. E. POND, JR.

Yes, put a thin board cleated on top, with a half bee-space beneath, over the frames, and shut off all upward ventilation. Give a large entrance guarded against high winds, and protect the hive with 3 inches of fine, dry chaff or sawdust packed close all about the hive. Such preparation prevents currents of air through the hive and all undue loss of heat, enabling hibernation in early winter, and the best possible condition for breeding in late winter. With just enough combs to hold needed stores, it is the only highly successful methods of wintering out-of-doors.—G. L. TINKER.

There has been no attempt so far as I know, to keep up a uniform temperature in the hives while on the summer stands. There is certainly no practical method known to the art of man by which it could be accomplished. I have frequently thought that it would be practicable to raise the temperature in the hives at inter-

vals during protracted cold spells, so that the bees could change their position, take food, etc. This might be done by introducing warm air into the hive by means of a very simple apparatus.—G. W. DEMAREE.

Alsike Clover.

Query, No. 311.—1. Is Alsike clover a hybrid clover? 2. How tall does it grow?—Cincinnati.

2. About a foot high here.—G. M. DOOLITTLE.

2. Nearly as high as red clover.—C. C. MILLER.

1. Yes. 2. From a few inches to 2 or 3 feet, depending upon the soil and season.—W. Z. HUTCHINSON.

It is said to be a hybrid between the common red and the white clover, hence the name *Trifolium hybridum*. Surely its appearance favors the statement. Its growth depends upon the quality of the soil. We have it 18 inches long on our light, sandy beds.—A. J. COOK.

Alsike is supposed to be a cross between red and white clover, and grows very tall, or rather long, sometimes, for when it reaches 6 or 7 feet in length, it ceases to stand up. Usually, however, it grows to about the length of red clover.—JAMES HEDDON.

1. It is supposed to be. 2. It will depend upon the soil and cultivation. It has been known to grow from 5 to 7 feet high under favorable conditions in this locality; this, however, is only a few stalks in a field. Two to 3 feet is an average.—J. E. POND, JR.

1. Alsike clover is said to be a hybrid plant. Whatever may be the facts, no close observer can examine the plant carefully without being impressed with the idea that it is a cross between two or more varieties of clover. 2. My experience is limited in the cultivation of Alsike clover. As far as I have tried it, it grows nearly as tall as common red clover. So far as my neighbor bee-keepers and myself have tried it, it blooms profusely the second season after sowing, produces seed, and perishes like all biennial plants do.—G. W. DEMAREE.

Floating Pollen in Honey.

Query, No. 312.—It is admitted that all honey contains more or less "floating pollen" (so-called); can you give an analysis that will fully determine the proportion of pollen contained in both spring-gathered and fall-gathered honey? If so, please do so?—G.

1. Some think so. My opinion is, that it is "straining" at a "far-fetched" idea to protect the "pollen theory." 2. No.—G. M. DOOLITTLE.

I think no one can do this. It varies not only with different kinds of honey, and I believe at different

times with honey from the same kind of bloom.—A. J. COOK.

I cannot; I have never seen any practical necessity for so doing, as I do not deem floating pollen a disadvantage but an actual necessity, if early brood-rearing is desired or desirable.—J. E. POND, JR.

I cannot and do not know who can, but should think almost any chemist could. If all of the honey in our apiary was alike, I think such analysis would give us a grand cue as to the safe wintering of our bees.—JAMES HEDDON.

That is hardly a question for a man that makes his living producing honey, but for the chemist or amateur who keeps 2 or 3 colonies, and whose experiments are of more value to the fraternity than some are willing to admit.—C. C. MILLER.

It is not admitted that "all honey" contains pollen in quantity sufficient to have a practical bearing in an ordinary analysis of the article. Some honey contains more pollen than other honey does, for the reason that more of the farina of the flowers is floating in the air at one time than at another. Microscopically speaking, there is pollen in every thing, and everywhere during the summer months.—G. W. DEMAREE.

Guibourt, Calloux, Wurtz and other popular chemists give the analysis of honey. Probably the most reliable analysis is the one made by Dr. J. Campbell Brown, an English chemist. His average percentage numbers are as follows: Laevulose, 36.45; dextrose, 36.57; mineral matter, .15; water expelled at 100° C., 18.5, and at a much higher temperature, with loss, 7.81; the wax, pollen, and insoluble matter vary from a trace to 2.1 per cent. The amount of "floating pollen" in a given quantity of honey can be ascertained as a sediment by mixing the honey with water so as to make it very thin.—J. P. H. BROWN.

Honey contains pollen that may be seen by a microscope, but it is so little that practically it amounts to nothing. The theory that "floating pollen" in honey is ever a cause of disease in bees, rests upon the feeblest kind of evidence. No two samples of honey would be apt to contain the same proportion of pollen, whether fall or spring gathered, and I cannot think that if the average was known it would be of benefit, aside from curiosity, to bee-keepers.—G. L. TINKER.

Taste and Odor of Honey.

Query, No. 313.—My neighbor has been in the bee-business for a number of years, and says that his bees store honey from peppermint, and that the honey tastes and smells of the same. Will bees store honey that will taste and smell of the flowers from which it is gathered?—H. B.

Yes.—W. Z. HUTCHINSON.

Yes, of course.—DADANT & SON.

Yes, the aroma of flowers is contained in the honey obtained from them.—G. L. TINKER.

I have never tasted such honey except buckwheat. Even this does not have the exact aroma of the flowers.—G. M. DOOLITTLE.

I think it is so in general. Why do you not taste and smell the honey, and then you will know?—C. C. MILLER.

Yes. I think the bulk of the honey takes its flavor and aroma from the flowers from which it is gathered. These properties diminish with age.—J. P. H. BROWN.

All honey contains the aroma of the flowers from which it is gathered; and there is no reason why strongly aromatic plants like the mints should not give their distinctive flavor to the honey gathered from them.—J. E. POND, JR.

Yes, some honey will do so. I once received a sample of extracted honey from the South tasting so strong of tobacco that it was supposed by the owner to be worthless. I gave him a good customer of mine, who bought 3 or 4 barrels per year to moisten tobacco.—JAMES HEDDON.

I think this matter needs investigating. I should look about and see if some one had not been careless with the peppermint bottle. We have large peppermint plantations in Michigan, and I have never heard such a statement here. So far as I know fruit-blossom honey is the only kind that would suggest its origin by its flavor. And even in that case one would be more sure to guess (?) correctly, if he knew before guessing.—A. J. COOK.

Decidedly they will. But it depends somewhat upon the state of the weather at the time the honey is gathered. In the rainy year of 1882, the common milk-weed could be smelt and tasted plainly in the honey, so much so that I could not eat it. Also the smart-weed imparted its smell and taste to the honey. I am glad to say that such is not frequently the case.—G. W. DEMAREE.

Hive-Ventilation—Side-Open Sections.

Query, No. 314.—1. Is it a good plan to raise the hive $\frac{1}{2}$ -inch from the bottom-board in hot weather? Will it make any difference about storing surplus? How about preventing swarming? 2. Is it any advantage to have openings at the side of sections, so that bees may pass from one to the other without going below or above?—R. D. R.

1. It works well with me. I have done so for a good many years with the best of success. 2. I have not used any with side-opening.—H. D. CUTTING.

1. It worked well in my apiary, and makes no difference about the surplus crop, nor about the swarming, so far as I have been able to see. 2. Decidedly, no.—G. W. DEMAREE.

1. To the first part, yes, and more too. To the second part, not if the weather is very hot. It will help to prevent swarming, by making the bees more comfortable. 2. Yes.—DADANT & SON.

1. It depends upon the size of the entrance before raising. If too close it may hinder storing in very hot weather, and favor swarming. 2. I was prejudiced in favor, but a trial in 1885 showed no advantages.—C. C. MILLER.

1. I do not so raise them. An entrance $\frac{3}{8}$ x14 inches I consider ample room for all the requirements of the bees. 2. I do not use such, but I should judge that it might help some.—G. M. DOOLITTLE.

If the entrance is not large enough it would be a good plan. Shade and ventilation probably retard swarming. 2. I have never used such sections; and should not think there was any advantage in their use.—W. Z. HUTCHINSON.

I see no objection to it; neither do I see any great advantage in it if the hive is well shaded. It would make no difference in storing surplus. 2. I think there is some advantage in having openings on the side of sections.—J. P. H. BROWN.

1. I always desire to have ventilation enough to keep the strongest colonies active, even in the hottest weather. I do it by large openings to the hives. Improper ventilation, I think, might lead to swarming, and certainly enforces idleness. 2. I have never tried such sections. I should not suppose that they would be any better, though some praise them.—A. J. COOK.

1. I abandoned the practice. It did not prevent any tendency to swarm, neither did it give me more surplus. It compelled the bees to guard the hive from every side, and both they and I prefer one side.—JAMES HEDDON.

It is a good plan to give ample ventilation in hot weather. More surplus will be stored when ample ventilation is so given. It may or may not prevent swarming. 2. Sections should have such openings as will allow of free communication from one to another, and side-openings are necessary for this purpose.—J. E. POND, JR.

1. Raising the hive from the bottom-board has little to do with storing surplus or swarming. 2. My experience the past season with side-opening sections has been such that I shall hereafter use no other kind. They remove all objection to the use of separators, cause the sections to be filled out plump at the sides, and when reversed, plump all around. The corner and side sections of the case are also completed, and ready to take off almost as soon as the centre ones are. But the facility in using separators, the advantage to the bees, and the little propolis attached to sections or separators, would amply repay any one to use side-opening sections.—G. L. TINKER.

Moving Bees before Wintering.

Query, No. 315.—Will bees be as likely to winter well hauled 80 rods, as they would to be picked right up and carried a few rods and put into a cellar? I wish to take my bees to a neighbor's cellar.—Pa.

My experience says yes.—G. M. DOOLITTLE.

They will, if carefully handled.—J. P. H. BROWN.

It will make but little difference if you are careful. The less you can disturb them the better.—H. D. CUTTING.

If they are not jarred in handling, I think they will. A light spring wagon would answer nicely.—G. L. TINKER.

I do not see any reason why they should not, if care is taken to disturb them as little as possible when moving them.—J. E. POND, JR.

I should feel afraid of the hauling, although the difference in cellars might make up for the damage in hauling.—C. C. MILLER.

They will winter best where they are least disturbed when put in, but in a good season it may make no difference.—DADANT & SON.

It may make no difference, but I should prefer to have bees put into the cellar so quietly and carefully that they would not know they had been moved.—W. Z. HUTCHINSON.

Bees may be moved from place to place late in the fall or in early spring without sustaining any injury, so far as my experience goes.—G. W. DEMAREE.

Sometimes such shaking up does not and cannot do any harm, and again, with other kind of stores, it tends to engender bee-diarrhea, I believe, from careful observation.—JAMES HEDDON.

I think it would be just as well, though I should prefer to have them have a good flight after moving, before they are put into the cellar. I have known several times of bees being carried miles and put at once into a cellar, and yet winter well; still I should not recommend any such practice.—A. J. COOK.

Moving Bees by Wagon.

Query, No. 316.—1. I want to move 30 colonies of bees 75 miles on an ordinary farm wagon; how must I prepare both wagon and bees? 2. Are coil-springs for such wagons made? If so, where can they be obtained? I cannot ship by rail.—Texas.

Give the hives plenty of air—ventilation. Use a large, flat hay-rack, and put on about one-fourth of a load of hay, and then the bees on top of all, and rope them on secure. Drive carefully, and no springs are needed. Water them every five hours if they have brood in the combs.—JAMES HEDDON.

CORRESPONDENCE

Explanatory.—The figures BEFORE the names indicate the number of years that the person has kept bees. Those AFTER, show the number of colonies the writer had in the previous spring and fall, or fall and spring, as the time of the year may require.

This mark ⊙ indicates that the apiarist is located near the center of the State named; ♂ north of the center; ♀ south; ♂ east; ♀ west; and this ♂ northeast; ♀ northwest; ♂ southeast; and ♀ southwest of the center of the State mentioned.

For the American Bee Journal.

Intestinal Accumulations of Bees.

C. W. DAYTON.

I have just returned from a wander down through the accumulation of ideas presented on page 567. I found (taking reports for truth) that while Mr. Heddon succeeded in preparing scores of colonies for winter without any nitrogenous food (pollen), Mr. Doolittle was unable to prepare even one colony for winter without some grains of pollen lurking about the combs. This might indicate that Mr. Heddon was a smarter man than Mr. Doolittle. But come to think about it Mr. Heddon's combs were not passed before the microscope as were Mr. Doolittle's, neither had the bees the diarrhea. On the same page we are informed that the testimony of an eye-witness over-weighs all other kinds of evidence; yet the writer does not inform us whether the evaporated excreta which Mr. Heddon scraped from the brood-frames could be so testified to, as being the excreta of a diseased bee or a healthy one.

Those who have read the bee-papers should recollect that the bees selected by Prof. Cook for examination were of the last in the colonies to die, and having the most turgid abdomens, and were not fair representatives of the colonies. The diarrhetic accumulations are spoken of as consisting almost entirely of undigested pollen-grains, when the majority of the cases finds it to be water with the pollen afloat, and in proportion as to ten to one.

We would be led to believe that a mixture of sugar and water in a fermenting condition could not from any cause pass the stomach of the bee and amount to an excessive abdominal accumulation; and a few insist that it would not be diarrhea, because it would not spot the snow.

I wish to be credited with the idea that the intestines of the bee may become loaded even to bursting, as were those Prof. Cook dissected, and yet not bear a trace of diarrhea, and I think my evidence that it is a function of health, will stand against evidence that it is diarrhea.

There are amongst us those who know diarrhea from healthy conditions, and who have seen diarrhea

with and without the presence of pollen, and it is my candid belief that Prof. Cook can obtain diarrhetic bees for examination whose excreta or combs do not contain pollen.

On page 567 we read: "Colonies wintered without nitrogenous food have not a trace of diarrhea." I ask, have the colonies so wintered had their combs subjected to careful tests with the microscope as in the case of Mr. Doolittle's? as the writer repeats elsewhere in his article, that there was no pollen found in the intestines of the diarrhetic bees sent to Prof. Cook by Mr. Doolittle, but because there was a trace of pollen found on the comb sent by Mr. D., it (pollen) must have been the cause of the diarrhea. A frail argument. In the logic offered us we often find a grain of pollen comparable to the particle of musk that continues its perfume for thousands of years. At other times the cells may be half full pollen, with some sugar syrup covering it, and the colony is safe.

Again, I find on page 567: Bees with no pollen do not accumulate fecal matter. Many apiarists have known bees to contain accumulations of a transparent souring substance that emitted the diarrhetic odor and caused the soiling of the surroundings. I have received bees through the mail that were fed entirely on sugar that showed unmistakable symptoms of diarrhea, but the evacuations were transparent. Call it fecal matter, or any intestinal accumulation, the effect is the same, the disease is the same, and it is caused by the same, but different cases differ in the composition of the accumulations. An experience of never having lost a colony with diarrhea is a pretty small experience to place against one of hundreds of colonies; in fact I do not know as so small an experience would admit of good judgment as to what is good evidence for or against the pollen theory.

It is indeed strange that the accumulation may consist so largely of water, and the pollen folks cannot see it; and it is far stranger still (if the pollen theory be true) that a colony may consume pollen all winter and not have the disease! Yet such men as Prof. Cook and Mr. Heddon—men who do not have time to go into the cellar, more than once or twice during a winter to observe the bees—should view the tracks and attest the cause of the disease with more certainty than the daily watcher of the bees. The discovery of the true cause of diarrhea ought to be worth a man's whole time and study for several years. I believe we are ready to admit that a colony with sugar stores is not so apt to have diarrhea as when it has honey and pollen, and also that searching the excreta for the cause should be as fruitless as to search the air we breathe for the cause of consumption.

Near the centre of page 567 it is said, "Diarrhea is due to the accumulation of fecal matter." The general understanding of the disease verifies that it is due to the nature of the accumulation, as the bees that

soil their hives most, and appear the most uneasy are seldom the most distended. Bees that consume food containing a large proportion of refuse substance may accumulate much fecal matter in a comparatively dry state and of a solid nature. Bees of this kind, with abdomens ever so distended, do not evacuate until they fly in the open air. If the distention is more than they are able to bear until the flight, then they die outright. When the bees are badly afflicted with diarrhea, they do not even wait until there is an accumulation, but begin early to befoul the hive or combs.

Sometimes diarrhea may set in after there is a healthy accumulation of fecal matter, in which case the accumulation would not be diarrhea, or the diarrhea an accumulation. If the pollen folks are in favor of calling constipation diarrhea, I would advise them to embark and seek an appropriate name for the "baby" and leave the diarrhea to the rightful possessors. I think the most of the points given may be considered as "testimony of experience," and therefore I hope they will secure the confidence of the jury.

Bradford, ♂ Iowa.

For the American Bee Journal.

Ontario Bee-Keepers' Convention.

The annual meeting of the Ontario Bee-Keepers' Association has heretofore been always held sometime during the Toronto Industrial Exhibition. This year, the President and other leading members being away in England, and the association being in a sort of transition state, owing to its having been recently incorporated by Act of Parliament, it was thought better to defer the annual general meeting until a later date. But, as many bee-keepers are present at the Toronto Exhibition, and would be disappointed if the association did not assemble, it was decided to meet as usual, and occupy the time with appropriate bee-talk. Accordingly, on Tuesday evening, Sept. 14, 1886, a goodly number of bee-keepers met in the large committee-room of the City Hall. The meeting was called to order by the Secretary-Treasurer, Mr. W. Couse, and in the absence of the President and Vice-President, Rev. W. F. Clarke was appointed chairman. It was voted to dispense with the reading of the minutes—also to defer all routine business, and proceed at once to the discussion of practical matters.

The chairman congratulated the association on several felicitous circumstances. The good attendance, although several accustomed to take a leading part, were necessarily absent; also, the excellence of the honey show at the Exhibition, notwithstanding the drain made by 35 honey-producers having sent the best of their product to the Colonial and Indian Exhibition now being held in London, England. Though we regretted the absence of the President, Messrs. Jones, Cornell and Me-

Knight, yet they were serving the interests of the association better where they are, than if they were present here. They were taking charge of a magnificent display of Canadian honey, which we had every reason to believe would open the eyes of John Bull to the fact, that here in this country we can produce just as good honey as can be gathered from the flora of Old England. The result would be, without doubt, the opening up of a large and permanent market for our product in Britain. As in the case of Canadian beef and cheese, so in regard to our honey, it had only to be known and tested to secure for it free access to the British market, and a wide sale there.

Most of all, the association was to be congratulated on having attained Government recognition and become a corporate body. It now takes its place beside the Fruit-Growers' and Dairymen's Associations, and like them, is henceforward to receive a Government grant. The present year \$1,000 has been given, and this sum has been appropriated to making a show of Canadian honey in England. Results would no doubt prove that the money was well invested. It is anticipated that a regular grant of \$500 per annum will be made, and this sum wisely expended, will greatly aid in the development of practical bee-keeping.

The act of incorporation makes certain requirements, and it might be well to consider what steps, if any, should be taken at this meeting to conform thereto. On motion, it was resolved to lay this matter over for farther consideration until the next evening. The convention then proceeded to consider the subject of fall feeding, with a special reference to the question of sugar-feeding. This point was fully discussed, and proved of sufficient interest to occupy the remainder of the evening. As the outcome of the discussion, it was

Resolved, That it is desirable to take every precaution that the bees have sufficient natural stores, and that a number of combs be set aside to supply any shortage; that, failing that pure extracted honey be fed; and that, as the very last resort, sugar syrup be fed for wintering.

The chairman requested that all questions to be answered, and all essays to be presented be in the hands of the Secretary at the opening of next evening's session. The meeting then adjourned to 7:30 the next evening, at the same place.

SECOND EVENING.

The convention resumed on Wednesday evening, with the acting President, Rev. W. F. Clarke in the chair. An essay from Mr. Allen Pringle, of Selby, Ont., the Vice-President, was read. It detailed his experience during the present season, from which it appeared that the yield had been moderately good. Two points of great importance in the fall and winter management of bees were urged, plenty of stores, and a young, fertile queen. The temperature which most conduces to quiescence of the

bees is the best temperature, whether it be 45°, 50°, or 55°. It will range somewhere between those figures, depending upon the hive ventilation, quilt-protection, humidity, etc. For hive ventilation, very free lower ventilation was recommended, with warm quilts of wool on top. On motion, thanks were presented to Mr. Pringle for his interesting paper.

A number wished to know how to ascertain if a colony had a young, fertile queen. The reply was, by inspecting the brood-chamber. If brood was found in fair quantity, it might be inferred that the queen was all right.

ALSIKE CLOVER.

The question was asked, what were the advantages of Alsike clover as a honey-plant. The President, by request, replied briefly: Alsike will grow in damp, moist places where the other clovers die out. It is a more abundant source of honey than white clover. One of our chief honey-producers this year has no crop, and one main reason is the absence of Alsike where formerly it was abundant. The chief advantage of Alsike, however, is that it is of great value to the farmer as a forage crop, as well as to the bee-keeper for honey.

FOUL BROOD.

A Toronto bee-keeper complained that foul brood was rife in one or two apiaries near him. He was certain of its presence in one, and had every reason to believe that it prevailed in a second. He thought steps should be taken to prevent the spread of this disease. It was also stated that there were some cases known to exist in Centre Wellington, and other parts of the Province. The President, on being asked to do so, explained the nature, symptoms, and appearance of this disease. He also urged the importance of every possible precaution being taken to suppress it. After a full discussion, it was, on motion

Resolved, That at the next annual meeting, the advisability of procuring legislative action for the suppression of foul brood be considered, and that this convention is of the opinion that active steps are necessary for the suppression of this disease.

The President stated that during the day he had looked up the statute incorporating the association; also that he had called on the Commissioner of Agriculture to ascertain what action we need to take to bring ourselves into line with the Act; and that as the result of his inquiries he found that there were certain steps to be taken, which he proceeded to specify. After some discussion, the following resolutions were passed:

Resolved, That as the Constitution of this Association requires that the time and place of the annual general meeting shall be fixed by open vote of the association, Toronto, and Dec. 7 and 8, 1886, be selected as the time and place of the annual general meeting for the current year.

Resolved, That the present membership and official appointments hold good until then.

Resolved, That the executive committee be instructed to prepare such amendments to the constitution and by-laws as may be necessary to conform to the Act of Incorporation.

Resolved, That the Secretary at once make the sworn return of the number of members and paid subscriptions required by the Act of Incorporation.

After some informal talk and sundry votes of thanks, it was

Resolved, That the association do now adjourn until Dec. 7, 1886.

W. COUSE, Sec.

For the American Bee Journal.

The Yucca or Spanish Bayonet.

W. W. BLISS.

This is one of California's most beautiful wild flowers. In their wild state they seldom attain the height of more than 8 to 12 feet. In the summer of 1884 one bloomed in Pasadena that attained the height of 25 feet or more. This one was transplanted from the mountains to an orange orchard some 8 or 9 years ago. The shaft or flower-stalk is the growth of but a few weeks; and as it stood with its top completely covered with creamy-white flowers, it was a sight that is seldom seen.

This species of the yucca (*Yucca baccata*) dies after it blooms; it is then that it is of special use to the bee-keeper. The broad heavy leaves that grow around the stalk near the ground are gathered and dried; when combed out, they make a nice brush, which is superior to anything for brushing the bees off the combs in extracting. They are a soft vegetable fiber, from 3 to 4 inches wide, almost indestructible, and never known to come loose in the handle; besides, they can be sold at a price within the reach of every one.

Duarte, ♀ Calif.

For the American Bee Journal.

The Poetry of Bee-Keeping.

JAMES HEDDON.

The past season has been for me the busiest of my life. Five hundred colonies of bees, a business larger than ever, students to instruct, a large and varied correspondence, increased and interesting experiments and inventions, have all contributed to over-work, yet have made life seem of more importance, and better worth living. I offer the foregoing facts as an excuse for my delay in expressing my thoughts upon reading Rev. W. F. Clarke's little poetical work, devoted to our chosen pursuit, and recently presented to the public.

Although I had the honor of reading it in manuscript and proof, it was not until this week that I could command the time to read it in its complete, corrected, book form. As is stated on the cover, the reading is "lively," "entertaining," "practical"

—aye, and more, it is spicy and replete with wit and wisdom. But this is not all; Mr. Clarke's "Bird's-Eye View of Bee-Keeping" is not only terse, plain, vigorous, and pointed, but being all in rhyme, it makes the strongest impression upon the reader in the fewest possible lines. In the preface the author asks if the poetry has all gone out of bee-keeping. Allow me to answer that question by asking how poetry could desert a pursuit so beautifully and closely connected with nature, that is

"In every charm supreme!
Whose votaries feast on raptures ever new.
O for the voice and fire of seraphine,
To sing the glories with devotion due!
Blest be the day I 'scaped the wrangling crew,
From Pyrrho's maze, and Epicurus' sty;
And held high converse with the god-like few,
Who to th' enraptured heart, and ear, and eye,
Teach Beauty, Virtue, Truth, Love and Melody."

Is there not always as much poetry in the works of nature as the observer is capable of receiving from it? In other words, is not the poetry in the brain that looks upon the scene? Next to field sports I have found bee-keeping best calculated to arouse the poetic sentiment within. Who can stroll over the fields during this month, watching

"The pollen-dusted bees
Search for the honey-less
That linger in the last flowers of September,
While plaintive mourning doves
Coo sadly to their loves,
Of the dead summer they so well remember."

without a heartfelt gladness that the poetic sentiment is in the world, and that he has received a share.

Mr. Clarke has well claimed that in apicultural literature there is room, yes, a demand for thoughts delivered in rhyme, for is it not true that

"Sages and chiefs long since had birth,
Ere Caesar was, or Newton named;
These raised new Empires o'er the earth,
And those, new heavens and systems framed;
Vain was the chiefs, the sages' pride!
They had no poet, and they died.
In vain they schemed, in vain they bled!
They had no poet, and are dead!"

I consider the book uncommonly instructive and correct in its teachings, considering its brevity and that it is written for beginners.

Without attempting to eulogize all of the many well-put assertions that I consider correct, nor criticize the few that do not agree with my experience, I will not pass without merely mentioning my pleasure at noting Mr. Clarke's truisms, wherein he states that beginners should seek a location clear of other bees; should not expect to get rich in a minute; and should not urge every one to embark in bee-keeping. I endorse what he says about the treatment of angry bees, and scores of other things too numerous to mention here.

I cannot agree with him about the fitness of bee-keeping for ladies; I fear his great gallantry has led him astray. We do not agree on hibernation yet, and I think few will agree with his statement (on page 15 of his book) that hybrid bees show greater tendency to swarm than pure Italians. The German bees, from whence came the cross, are, I believe, conceded to be the most non-swarming race.

I cannot agree with him on page 20, that any honey-producer should wear gloves of any kind. I believe such would be left far behind in the race.

I know of no more appropriate place to apply the old adage, that "Cats with gloves on catch no mice." I would hardly want queens reared in the manner mentioned on page 29; yet this may be only a matter of prejudice. We all know that Mr. Clarke

"Sometimes raises scruples dark and nice,
And after, solves 'em in a trice;
Like one who purposely had 'catched'
The itch, in order to be scratched."

On page 10 he speaks about arbitrary prohibition of persons keeping a few bees, as though this prohibition was of man's rather than nature's law. That the specialist can produce honey at a price that the dabbler cannot, is a law of nature that no one can change.

Taken all in all, looked at from my stand-point, I find, as compared with other books, very little to criticize as compared with the much to commend. I have placed the little work in my apicultural library, with a feeling of pride and satisfaction, and it is with perfect assurance that I say that it is worth many times more than the 25 cents asked for it, to any bee-keeper, as well as to many that never expect to keep a bee.

"Call it not vain—they do not err
Who say that when the Poet dies,
Mute Nature mourns her whisperer,
And celebrates his obsequies."

And now in closing this hasty review of another valuable addition to apicultural literature, I think I am warranted in saying, in behalf of our fraternity, that

We can but think, our faithful friend,
Of life will and you lead, unwearied
Of tested bonds that naught can rend,
And e'en if years be sad and dreary,
Our pledged friendship will extend!"

Dowagiac, 9 Mich.

For the American Bee Journal.

Foul Brood—A Real Bee-Malady.

T. F. BINGHAM.

That "moss covered" saying, "Nothing new under the sun," may now with aesthetic propriety be laid on the dusty shelf of the past. The disease may have been an old one, though Prof. Cook intimates that it is a matter of doubt whether Aristotle knew anything about it. To us it is not of importance whether Aristotle recognized the odor of the decaying larvæ or undigested pollen as symptoms of disease of specific types.

On page 584 is a concise and careful description of the process of cure and presumed prevention of foul brood; the condition and phases of the much dreaded disorder, as it existed in the apiaries treated by the process described.

It will be noticed that while all the older writers on bee-diseases have regarded foul brood as its name implies, viz: a disease of the brood, and not of the older and mature bees; while the article above referred to avers that "bees crawled out of the hives to die by tens of thousands—effect of treatment apparent in one day." There can be no misunder-

standing that sentence. The disease killed the old bees, and the dope cured the old bees the same day.

It is of importance to bee-keepers that we have just such descriptions of an malady which may even in a single apiary occur. Theories admit of discussion, and frequently do much to fill bee-papers with debatable matter, but facts clearly set forth, as are those of Mr. McLain, shed light in dark places.

Foul brood, or the dying of partially mature bees in their cells, appears to be a very common occurrence in apiaries, and it seems also to be of such a nature, either from its character or from the influence of what has been written about it upon the nervous systems of various bee-keepers and writers of bee-literature, that either from its real enmity to bee-culture, or the superstition with which it has been regarded, that it is a real malady, and one of great moment.

While Mr. McLain's experience may have inadvertently cast a flod hue over the dreaded—but as now appears not well named disorder—we shall all welcome as new and substantiative the facts he has so clearly given, demonstrating that combs and hives have been renovated in an easily practicable manner. While the fact seems so plausible, it behooves every bee-keeper to remember that "eternal vigilance is the price" of success as well as liberty, and that too much care cannot be given that diseased brood does not spend in his own apiary and to those around him.

Abronia, 9 Mich.

For the American Bee Journal.

Is Pollen Necessary for Bees in Winter?

SAMUEL CUSHMAN.

It would be hard to better the remarks made by Rev. W. F. Clarke (page 810 of Vol. 21 of the AMERICAN BEE JOURNAL), in regard to Prof. Cook's essay on the "Pollen Theory," read at the Detroit Convention. They were, that "The pollen theory had got its quietus from Prof. Cook. He has mentioned that bees cannot breed without taking nitrogenous food. If they take that food it must be digested and the feces excreted. Well, Mr. Barber and Mr. Hall have proved that bees breed largely, i. e., work hard, and therefore must eat and digest strong food. The inference is plain. The bees if they excrete do it in dry feces. They must excrete; that is clear; therefore, there is no danger in having pollen in the hive. On the contrary it is necessary."

The Professor's essay (page 25 of the BEE JOURNAL for 1886) is one of the best articles against the theory that I have seen, and it seems to me that bee-keepers who read it must realize (in spite of the Professor's conclusions) what a serious matter it would be to deprive the bees of their pollen. The fact that the bees which were deprived of pollen died without

showing that kind of diarrhea does not prove that bees winter better without it. It only shows that bees dying without it in their hive did not have any in their excreta or intestines. I fail to see anything favorable to the theory in this. Why did they not live? If they died without pollen, how much better off were they than if they had it, and had died showing diarrhea. It would look as though they were killed by cold in each case. Cold caused such a depression of function that food eaten was not digested, or possibly caused such excessive exertion to keep warm as to prevent digestion, result death from lack of nutrition. Suppose the bees both with and without pollen, had not been exposed long enough to kill them; warm weather gave them a let up for several days, they were exhausted (in each case) from exertion and lack of nutrition. Which colonies have the best chance to repair the waste of nerve and muscle, those with pollen or those without?

Those without have only the supply contained in their bodies, which has been largely drawn upon; they will have to wait until spring, if they live until then, before they can get materials for repair, while the others can supply their needs at once. You may say, if they were not exposed to such excessive cold, they would not need repairs, neither would they have diarrhea, or eat more pollen than they could digest. We are shown that pollen does no harm, if the temperature is right, and that quantities of brood are reared before their spring flight.

Animals that hibernate store their carbonaceous or heat-giving, as well as the nitrogenous elements in their bodies, enough to last all winter. Bees store both in combs, and have we any more reason to think that they have in their bodies a sufficient supply for winter of one and not the other of these elements.

Man or animals require for food carbon, nitrogen and mineral salts in certain proportions. Different seasons and circumstances require different proportions, but neither of these elements should be entirely lacking. I do not doubt that under certain very favorable conditions bees may be brought through the winter alive with absolutely no pollen, but in my opinion, with the same conditions, they would be much better off with it.

Possibly there may be times and locations when a hive might contain too much pollen, not giving enough honey room in some combs, and if cold confined the cluster to these combs, the result would be disastrous; but in such a case, with enough honey in the hive to support them, and with proper temperature maintained, no trouble would occur. Bees will not eat it to harm them unless in an unnatural condition. Shall we not regulate the temperature instead of depriving them of a necessary food, because they eat excessively of that food when in an unnatural condition from lowered tem-

perature. Then when they choose to rear brood they have the means to do so.

Although this theory has been advocated and supported by a few such prominent apiarists and writers as Prof. Cook, Prof. Hasbrouk, James Heddon and others, it does not seem to meet with favor from the majority of bee-keepers. Our heaviest and most successful producers continue to leave a liberal supply of pollen in the hives for winter.

In the Professor's essay we are told that nitrogen may be changed or transformed into fat. Does he mean to tell us that by a vital process nitrogen may be chemically changed in the body into fat? He gives fatty degeneration of the heart as an example. I have always supposed that in this case the nitrogen was replaced by fat, that the muscle was wasted by use and slow oxidization, and through faulty nutrition was not removed, but fat being abundant in the blood, was deposited instead of the proper material. Here is another chance for our medical readers to enlighten us, and I hope they will.

Prof. Cook has rectified the impression given as to the amount of air required by bees, and I hope we shall yet be informed that it is not advisable to remove the pollen from the hives, that everything considered bees stand a better chance with than without it, that fermented or thin honey may also cause diarrhea, that a low temperature is harmful, pollen or no pollen, that the point to be considered is temperature and pure air, and how to keep it right.

Whether Mr. Heddon has been of benefit or not to our industry in advocating this theory, there is no question in my mind but that he has done great good and deserves much credit for perfecting and so strikingly bringing to our notice an improved system of hive manipulation, which, it seems to me, all progressive bee-keepers must appreciate. I do not refer to the reversing or inverting feature, but to the interchanging of shallow brood-frames in cases, and the manipulation of cases instead of frames.

Pawtucket, ♂ R. I.

For the American Bee Journal.

Bees and Honey at Michigan State Fair.

H. D. CUTTING.

The Michigan State Fair opened on Sept. 13, with ten exhibitors in the bee and honey department. A. D. D. Wood, of Rives Junction, had a large exhibit of one-piece sections, comb-foundation mills, honey-extractor, comb foundation, extracted honey in tin pails, 2 colonies, and several other articles. W. D. Higdon, of Jackson, exhibited several cases of comb honey, 2 colonies, beeswax, smokers, honey-knife, queen-cages, and a case of bee-literature. O. A. Quick, of Leonia, showed comb and extracted honey, implements, case of sections, etc.

Mr. Shelby, of Jackson, exhibited 10 pounds of extra fine beeswax; W. D. Soper, of Jackson, a section-case; W. Z. Hutchinson and brother Elmer, a large lot of comb honey in shipping-cases (14 sections to the case), extracted honey in Muth jars, honey-bearing plants mounted (about 80 in all), several different hives, honey-extractor, a good line of implements, 8 colonies of bees, case of bee-literature, beeswax, etc.

The writer exhibited comb and extracted honey, a large collection of implements consisting of 228 different articles, 3 colonies of bees, case of bee-literature, foundation mills, extractors, honey-bearing plants (170 in number), bees-wax, sections, foundation, bee-hives, smokers, knives, etc.

The Agricultural College exhibit, in charge of Mr. Gillette, consisted of a large and very fine collection of honey-bearing plants, samples of the different varieties of honey, and a colony of bees. Prof. Cook "hit the nail on the head" when he sent his able assistant, Mr. Gillette, to represent the College in this department. Every day at 2 p.m. Mr. Gillette placed a bee-tent over the colony of bees, opened the hive and showed to the large crowd of visitors "just how to do it." His lecture was very instructive and entertaining. Mr. Gillette will long be remembered for his gentlemanly courtesy by the many visitors and exhibitors.

Miss Anna Cutting showed a case of comb honey. Two ladies exhibited honey-plants in bloom, but I cannot recall their names; also one exhibit of a case of comb honey.

Dr. A. B. Mason, of Wagon Works, Ohio, presided as judge of the exhibit, with his usual good nature. He brought and placed on exhibition a piece of granulated honey 10x10x12 inches, as white as coffee C sugar, hard and dry. It was admired by many visitors. On the last day of the Fair one exhibitor sold over 100 packages of extracted honey, and to a careful observer you could see that the greater portion went to persons that were not accustomed to eating honey. This is one of the best places to make consumers of honey, if you give them a first-class article. We find many persons prejudiced against extracted honey, but when they persist in calling it "strained" honey do not appear vexed, but explain to them that it is not strained, but extracted honey, and show them just how it was done, and in this way you help to educate the masses in the use of nature's purest sweet—honey.

We missed Mr. R. L. Taylor as an exhibitor this year, but he came and made a two days' visit. The State Agricultural Society are well pleased with our efforts to make a success of this department. The premium list is large (\$300), and now all we want is more exhibitors. We should have at least twenty every year. The greater the exhibits the more interest will be taken. Several that are not in the habit of making exhibits have promised to be on hand next year and make it interesting.

Clinton, O. Mich.

North American Bee-Keepers' Society.

FRANK L. DOUGHERTY.

The North American Bee-Keepers' Society will hold its 17th annual convention Oct. 12, 13 and 14, 1886, at Indianapolis, Ind. The meeting will be held in Pfofflin's Music Hall, 83 and 84 North Pennsylvania Street, one of the most pleasantly situated halls in the city, having good ventilation and plenty of light. The Society head-quarters will be at the Occidental Hotel, corner of Washington and Illinois Streets. The regular rates of this hotel are \$3 per day; special rates for those in attendance at the convention, \$1.50 per day.

The Northwestern Bee-Keepers' Society, the Indiana State Society, the Eastern Indiana, with various county and joint societies will meet in union with the North American, making it one of the most important meetings of bee-keepers ever held in the country.

Every thing possible will be done to make the meeting pleasant and entertaining. An earnest, cordial invitation is extended. Following is the programme:

FIRST DAY—TUESDAY.

Forenoon Session, 10 a.m.—Convention called to order. Address of welcome, by Gov. L. P. Gray; "Response" by the President, H. D. Cutting; "Welcome to the City," by Mayor Caleb S. Denny; "Thanks," Dr. C. C. Miller, President of the Northwestern Society. Calling the roll of members of last year. Payment of annual dues. Reception of new members and distribution of badges; reports of Secretary and Treasurer. Announcements.

Afternoon Session, 2 p.m., Special Business.—Annual address of the President; "Bee-Studies," Prof. A. J. Cook, Agricultural College, Mich.; "Apicultural Journalism," John Aspinwall, Barrytown, N. Y.; "Bee-Literature," Thomas G. Newman, Chicago, Ills.; "The Coming Bee—What encouragement have we to work for its advent?" R. L. Taylor, Lapeer, Mich. Subject for discussion, has "Apis Americana" been reached?

Evening Session, 7:30 p.m.—Announcements. Miscellaneous business. Discussion of questions that may have accumulated during the day.

SECOND DAY—WEDNESDAY.

Morning Session, 9 a.m.—Announcements. Communication. Call of the Northwestern Society to elect officers. Election of officers of the Indiana State Society. Call to order. "Rendering Comb into Beeswax," C. F. Dadant, Hamilton, Ills.; "Foul Brood," A. J. King, New York. "North American Bee-Keepers' Society—Past, Present and Future," Rev. W. F. Clarke, Guelph, Ont. Selection of place for holding meeting in 1887. Election of officers.

Afternoon Session, 2 p.m.—Announcements. Miscellaneous business. "Bee-Keeping and Apiculture," Prof. N. W. McLain, U. S. Apicultural Station, Aurora, Ills.; "Feeding Bees for Winter," Jas. McNeill, Hudson, N. Y.; "Wintering Bees," Dr. J. B. Mason, Wagon Works, Ohio; "Solid Truths relative to the Apicultural Interests of the east coast of Volusia county, Florida," by John Detwiler, New Smyrna, Fla. Subjects for discussion, "Is the use of Foundation Necessary in Modern Bee-Culture?" "Are Perforated Honey-Boards a Success?" Unassigned essays.

Evening Session, 7:30 p.m.—Announcements. Miscellaneous business. Discussion of questions in question-box. Social communications.

THIRD DAY—THURSDAY.

Morning Session, 9 a.m.—Announcements. Miscellaneous business. Com-

munications. "The National Bee-Keepers' Union," by Thomas G. Newman, Chicago, Illinois. "A Talk on Hives," by James Heddon, Dowagiac, Mich.; "Reversible Hives and Frames," J. E. Pond, Jr., Foxboro, Mass.; "Drones and Drone Comb," W. Z. Hutchinson, Rogersville, Mich.; Reports of Vice-Presidents; "Progress of Bee-Keeping in Indiana," Jonas Scholl, Lyons Station, Ind. "The Future of Bee-Culture," G. W. Demaree, Christiansburg, Kentucky.

Afternoon Session, 2 p.m.—Announcements. Miscellaneous business. Explanation of various articles on exhibition. Indianapolis, Ind.

Local Convention Directory.

1886. Time and place of Meeting.

- Oct. 6, 7.—Kentucky State, at Frankfort, Ky. Jno. T. Connley, Sec., Napoleon, Ky.
- Oct. 7.—Wis. Lake Shore Center, at Kiel, Wis. Ferd Zastrow, Sec., Mililome, Wis.
- Oct. 12—14.—North American, at Indianapolis, Ind. F. L. Dougherty, Sec., Indianapolis, Ind.
- Oct. 16.—Sheboygan Co., at Sheboygan Falls, Wis. Mrs. H. Hills, Sec., Sheboygan Falls, Wis.
- Oct. 16.—Western Iowa, at Stuart, Iowa. J. E. Pryor, Sec.
- Oct. 19.—Central Mich., at Lansing, Mich. J. Ashworth, Pres.
- Oct. 19, 20.—Illinois Central, at Mt. Sterling, Ills. J. M. Hambaugh, Sec., Spring, Ills.
- Oct. 21.—Southern Illinois, at Benton, Ills. F. H. Kennedy, Sec., Duquoin, Ills.
- Oct. 27—29.—Western, at Kansas City, Mo. P. Baldwin, Sec., Independence, Mo.
- Dec. 1, 2.—Michigan State, at Ypsilanti, Mich. H. D. Cutting, Sec., Clinton, Mich.

In order to have this table complete, Secretaries are requested to forward full particulars of time and place of future meetings.—ED.

SELECTIONS FROM OUR LETTER BOX

Bees Carrying in Honey and Pollen.—J. W. Sanders, LeGrand, Iowa, on Sept. 23, 1886, writes:

Our great drouth is over, and the pastures and roadsides have changed from a dark brown to a bright green, which makes it look as though spring had just set in. The thermometer, yesterday, indicated 92° in the shade, and to-day it is near 90°. Bees seem to be on a boom, and are carrying in both honey and pollen. We have had no frost yet to hurt the fall flowers. The white clover begins to look as though it was getting ready for another bloom; some heads already appearing. Cool weather may soon put a check to its rapid growth. There is but little fall honey yet.

Plain Sheets of Wax, etc.—J. G. Norton, Macomb, Ills., on Sept. 15, 1886, writes:

The season of 1886 has about closed, and I can say that it has been a very good one for honey. I have disposed of nearly all my crop at 10 cents a pound on cars here, 12½ cents being the highest price at retail that can be obtained, as our market has been

destroyed by a few that have been trying to keep bees here within the last four years. Our County Fair was held last week, and was a success. The display of bees, bee-hives, and honey was good, and admired by crowds of people. I succeeded in winning all the first premiums on bees, bee-hives and combs, and extracted honey, and I am well satisfied for the time and trouble taken. I think it an excellent way to advertise. In regard to using plain sheets of wax in bee-hives, I consider it a foolish practice. I have kept bees for 15 years, and have made many experiments, and know positively that bees do not build drone comb on worker foundation; neither do they in any instance change worker comb to drone comb, or vice versa. So if Mr. J. F. Hays will experiment again he will find his mistake. Old or inferior queens or laying workers lay eggs in worker combs, and these eggs hatch drones, but the size of the base of the cell is always the same, and cannot be changed. No system has yet been found to guarantee all-worker comb every time without the use of full sheets of foundation; and in my opinion, if it does not pay to use full sheets of foundation, it does not pay to keep bees. Bees will go into winter quarters in good condition this year, but the fall crop of honey will be very light, as not any surplus has been stored yet, and we can now expect frost on any night.

No Basswood Honey.—Will B. Robinson, Upper Jay, N. Y., on Sept. 13, 1886, writes:

Basswood was an entire failure in this section, but I obtained 275 pounds of comb honey from 8 colonies, spring count. I purchased an Italian queen, which I successfully introduced on Sept. 1. I opened the hive a few days later, and saw plenty of eggs and larvae. This is my first attempt at introducing queens. I also built up a colony with the black queen. In intend to Italianize my apiary in the spring. I think that I owe to the BEE JOURNAL all I know about bees.

Report.—Preston Taylor, Roodhouse, Ills., on Sept. 9, 1886, says:

I began in the spring with 14 colonies, increased them to 33, and have extracted 1,900 pounds of honey. My bees seem to be in good condition at the present time.

Italianizing Colonies.—J. L. Dewey, Sealy, Texas, writes:

The following is my plan of finding the native queen, for the purpose of Italianizing, and would like any suggestions if it can be improved upon to expedite matters: I first prepare a new hive with comb foundation, and an Italian queen caged within. Remove the old hive and bees, placing the prepared new hive on the old stand. I then drive all, queen among them, into a swarming-box with a slide door on one side and perforated

time on the other side, darkened with a sheet of plain zinc, to remove at pleasure. After all are in I slide out the sheet of plain zinc, and a few puffs of smoke make the bees get out of the hiving-box with a rush, and fly back to their supposed old home, to find a new outfit for house-keeping, and a well-charged feeder, at their pleasure; and all go to work as if there had been no change. Poor Mrs. Native Queen is found in the box alone, and no hunting. Who will improve on my plan?

Manilla Paper for Hives.—Albert Neuman, Rolla, Mo., writes:

I am making a double-walled beehive out of manilla paper. This I think will prove to be a first-class hive in every respect; a perfect non-conductor, strong, cheap, and a complete double-story hive, and only weighs 40 pounds. The material consists of 6 feet of $\frac{1}{2}$ -inch lumber, in 2-inch wide strips; 50 plaster laths, 32 feet of manilla paper for inside and outside walls, about 3 cents worth of $\frac{1}{4}$ -inch wire nails, 24 2-inch nails, and 1 pint of paint, for a two-story hive; 10 frames in the brood-chamber $12\frac{1}{2} \times 12\frac{1}{2}$ inches, outside measure. I would not have said anything about this hive until I had wintered my bees in it, but I did not wish any one to get hold of it and have it patented, for I desire this hive, if it proves to be as good as I think it will be, to be the property of the bee-keepers of this country. In the future I will describe how I make my skeleton as a foundation for the paper. Anybody that can handle a saw, hammer and square, can make it.

Was it Copied?—Chas. Dadant & Son, Hamilton, Ill., writes:

We were very much astonished, in perusing the BEE JOURNAL lately, to see that one of our leading writers, who has the reputation of an intelligent apiarist, has written an article on bee-culture partly copied from one of the leading bee-books, without any reference to the original. This is commonly called *plagiarism*. To make matters plain, and give "honor to whom honor is due," we refer the readers to page 471, and ask them to compare the last half of the middle column with the different paragraphs on pages 85, 86 and 87 of "Langstroth on the Honey-Bee," fourth edition.

[Desiring to do no injustice, we sent the above to Mr. Hutchinson, so that we may present his answer with it, and here it is.—ED.]

Yes, Bro. D., not only the portion of the article to which you refer was copied from Father Langstroth's work, but several other portions were copied from other works. The article, when written, which was nearly four years ago, was not intended for publication, but for reading at a horticultural meeting. After its reading it occurred to me to send it to the *Country Gentleman*, which I did, and it was published four years ago the

coming winter. In the original manuscript, quotation marks were used to indicate the extracts, but the printers in the office of the *Country Gentleman*, by an oversight, or from some reason, omitted nearly all of them. I might say that I have a habit of making my quotation marks very small and light. I did not think very much about it when preparing the address, but now I know that it would have been better to have given full credit, instead of simply using quotation marks. Bro. D. has my best thanks for taking me to task, as I shall try and profit by the lesson. I cannot close without also expressing my pleasure at the honorable manner in which he has brought up this matter, thereby allowing me to publicly make the *amende honorable*.—W. Z. HUTCHINSON, Rogersville, Mich.

Uniting Colonies.—E. K. Dean, of America Union, N. Y., writes as follows:

I formed a nucleus recently and gave it a valuable queen, which I had just bought, placing it close alongside of a large colony whose queen I wished to supersede, and intending to unite them when everything was favorable. A few days since, when the new queen had gotten well settled in her new home, and the nucleus was getting moderately strong, the colony sent out a large "buckwheat swarm," and now I thought was the time to unite them, so I watched the cluster till I discovered the queen, and destroyed her. Then I went immediately to the hives, and after smoking well, began by shaking every comb at the entrance of the hive of the colony which had swarmed, and put all the combs outside on the ground, except the one with the queen which I left until the last. About this time the swarm discovering the loss of their queen, came rushing back, and I quietly lifted the queen from the remaining comb and let her run in at the entrance, and then afterward shook the bees off in front of the hive. I tried to get a general mixing up by allowing two or three combs to get loaded three or four times, and shake them off again before I liberated the queen. I had no sooner got everything nicely closed up, however, before a general onslaught began, which was kept up, I think, till they annihilated the nucleus, and they were so fierce that they would drag out and murder freshly hatched bees, which, when I released and gave to other colonies, were allowed undisturbed admission. I feared the queen would share the same fate, but I found her all right a day or two since, and just beginning to lay again. She did not begin laying for several days. Queries: 1. In uniting what did I do, or leave undone, which should have been otherwise? 2. Do you think the value of the queen was impaired by the operation?

[You incurred a double and needless risk of losing your valuable

queen by introducing her twice to strange bees. Usually this slaughter among the workers will not take place under such circumstances, but the queen is the most likely to be killed. I presume they have now killed her, because of your opening the hive to see how she was received. I once had such a case of slaughter, and all my uniting and scenting the bees proved to be of no use. I think your queen is all right if now alive.—JAMES HEDDON.]

Convention Notices.

The annual meeting of the Kentucky State Bee-Keepers' Association will be held at Frankfort, Ky., on Oct. 6 and 7, 1886. All interested in bee-culture are earnestly requested to attend and help to make this meeting a pleasant and profitable one. The State Centennial will be celebrated at Frankfort, on Oct. 7, and excursion rates can be obtained on all railroads. A large attendance of bee-keepers is solicited. JNO. T. CONNLEY, Sec.

The St. Joseph, Mo. Inter-State Bee-Keepers' Association will hold its annual meeting on Wednesday evening of the Exposition week, September 30, 1886. Arrangements are being made to have an interesting meeting. The place of holding the meeting will be published in our local papers on Tuesday and Wednesday a.m. E. T. ABBOTT, Sec.

The Sheboygan County Bee-Keepers' Association will meet at Chandler's Hall, at Sheboygan Falls, Wis., on Saturday, Oct. 10, 1886, at 10 a.m. MRS. H. HILLS, Sec.

The annual meeting of the Western Bee-Keepers' Association will be held in Pythian Hall (11th & Main Sts.), at Kansas City, Mo., on Oct. 27—29, 1886. P. BALDWIN, Sec.

The next annual meeting of the Michigan State Bee-Keepers' Association will be held in Ypsilanti, Mich., on Dec. 1 and 2, 1886. H. D. CUTTING, Sec.

The Southern Illinois Bee-Keepers' Association will hold its next meeting at Benton, Ill., on Thursday, Oct. 21, 1886. F. H. KENNEDY, Sec.

The Union Bee-Keepers' Association of Western Iowa will meet at Stuart, Iowa, on Saturday, Oct. 16, 1886. All interested in the busy bee are requested to be present. J. E. PRYOR, Sec.

The Semi-Annual meeting of the Central Michigan Bee-Keepers' Association will convene in Pioneer Hall, in the Capitol Building, Lansing, the third Tuesday of October, at 10 o'clock, a.m. J. ASHWORTH, Pres.

The Illinois Central Bee-Keepers' Association will hold its next meeting at Mt. Sterling, Ill., on Tuesday and Wednesday, Oct. 19-20, 1886. J. M. HAMBAUGH, Sec.

All are respectfully invited to attend the next meeting of the Bee-Keepers' Association of Eureka Springs, which will be held at Eureka Springs, Ark., on Oct. 23, 1886. Business of importance to every bee-keeper Northwest Arkansas will be before the meeting. DR. S. S. PURCELL, Sec.

Simmins' Non-Swarming System is the title of a new English bee-book. The author claims that it will inaugurate a "new era in modern bee-keeping," and states that "it is based upon purely natural principles, and is the only system that can ever be relied upon, because no other condition exists in the economy of the hive that can be applied to bring about the desired result—a total absence of any desire to swarm." It contains 64 pages; is well printed and illustrated. Price 50 cents. It can now be obtained at this office.



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Special Notices.

To Correspondents.—It would save us much trouble, if all would be particular to give their P. O. address and name, when writing to this office. We have several letters (some inclosing money) that have no name; many others having no Post-Office, County or State. Also, if you live near one post-office and get your mail at another, be sure to give the address we have on our list.

Dr. Miller's Book, "A Year Among the Bees," and the BEE JOURNAL for one year, we will club for \$1.50.

A New Crate to hold one dozen one-pound sections of honey.—It has a strip of glass on each side, to allow the honey to be seen. It is a light and attractive package. As it holds but one tier of sections, no damage from the drippings from an upper tier can occur. We can furnish the material, ready to nail, for 9 cts. per crate. Glass 1½ c. per light, extra.

Red Labels for one-pound pails of honey, size 3x4½ inches.—We have just gotten up a lot of these Labels, and can supply them at the following prices: 100 for \$1.00; 250 for \$1.50; 500 for \$2.00; 1,000 for \$3.00; all with name and address of apiarist printed on them—by mail, postpaid.

Yucca Brushes are employed for removing bees from the combs. They are a soft, vegetable fiber, and do not irritate the bees. As each separate fiber extends the whole length of the handle as well as the brush, they are almost indestructible. When they become sticky with honey, they can be washed, and when dry, are as good as ever. The low price at which they are sold, enables any bee-keeper to have six or more of them, so as to always have one handy. We can supply them at 5 cents each, or 50 cents a dozen; if sent by mail, add 1 cent each for postage.

The Convention History of America and the AMERICAN BEE JOURNAL for one year, will be clubbed for \$1.15.

North American Bee Keepers' Society

The Chicago, St. Louis & Pittsburgh Railroad ("PAN-HANDLE ROUTE") take pleasure in hereby announcing to all delegates and their families desiring to attend the National Convention of Bee-Keepers' Union to be held at Indianapolis, Oct. 12, 13, and 14, that we have arranged to sell tickets to Indianapolis and return at \$7.30 each on certificate signed by Mr. Thomas G. Newman, General Manager Bee-Keepers' Union. Tickets good going Oct. 11, and returning up to and including Oct. 16.

Morning trains leave Chicago, from the Union Depot, at 8:30, reaching Indianapolis at 3:50 p.m. Evening train leaves at 8:30. Night train has through sleeping-car, and day train has through parlor-car to Indianapolis.

We can offer you superior accommodations and would be pleased to receive your patronage.

Tickets will be on sale in exchange for certificate at Union Passenger Station, corner of Canal and Madison Streets, Chicago, also at 65 Clark Street, corner of Randolph Street.

The Monon Route to Indianapolis.

The Monon Route is the short line between Chicago and Indianapolis, and those desiring to attend the National Bee-Keepers' Convention, Oct. 12-14, should bear this in mind. The morning train leaves from the Dearborn Station at 8:35, arriving at Indianapolis 3:45 p.m. Evening train leaves at 7:30 p.m., and has attached elegant Pullman sleepers. Tickets good going Monday, Oct. 11 and returning up to and including Saturday, Oct. 16, will be on sale at Dearborn Station, corner of Fourth Avenue and Polk Streets, also at the city ticket office, 73 South Clark Street. For further information call or address E. O. McCormick, G. N. P. A., 73 South Clark Street, Chicago, Ill.

Frank Leslie's Popular Monthly for October opens with a most interesting article, "The Tragical Close of a Strange Reign," the story of Louis II. of Bavaria well told and illustrated. The charming "Walks about London" capitally illustrated, is as good as an actual visit to the vicinity of the great capital of England, while "Summer Saunterings about Lake George" makes us feel that we have in our land all that is grand and romantic and interesting. Altogether the number is one that, in variety of topics, charm of writing and fineness of illustration, is unmistakably a hit. The plate, in gold and colors, is exquisite.

Sweet Clover, or Melilotus Alba, is almost the only resource for honey now, on account of the late severe July drouth. If the seed is planted in September, it will come up this Fall and bloom next year, in its second season.

We have a large lot of this seed on hand, and offer it at the following **Reduced Prices**, by express or freight:

| | |
|-----------------------|--------|
| One pound | \$0 20 |
| " peck—15 lbs | 2 25 |
| " bushel—60 lbs | 7 00 |
| " sack—80 lbs | 8 00 |

It will pay to buy it by the sack and sell it again in smaller quantities.

If you want a chance to make some money, and provide pasture for the bees during the Fall months, this is your opportunity!

Five Thousand new subscribers to the BEE JOURNAL is what we have made our calculations for; they will come in clubs between now and next spring. Installments are coming every day.

Honey and Beeswax Market.

The following are the very latest quotations for honey and beeswax we have received:

CHICAGO.

HONEY.—For comb honey, we quote 12@13c. Extracted 6@7c.
BEESWAX.—23c. **R. A. BURNETT,**
 161 South Water St.

NEW YORK.

HONEY.—We quote this year's crop as follows: Fancy white in 1-lb. sections, clean and neat packages, 15@16c.; 2-lbs., 12@13c.; fair to good 1-lb., 12@14c.; 2-lbs., 10@11c.; fancy buckwheat 1-lb., 11@12c.; 2-lbs., 9@10c. White clover extracted in kegs and small barrels, 6@6½c.; California extracted in 60-lb. cans, 5@5½c.; California comb honey, 10@11c.

BEESWAX.—Prime yellow, 22@24c.
MCCAUL & HILDRETH BROS.,
 34 Hudson St.

BOSTON.

HONEY.—The demand has improved. We are selling one-pound packages of white clover honey at 14@15c.; 2-pounds at 13@14c.

BEESWAX.—25 cts. per lb.
BLAKE & RIPLEY, 57 Chatham Street.

DETROIT.

HONEY.—Owing to more liberal arrivals the market for honey is lower. Best in 1-lb. sections, 12½@13c.

BEESWAX.—23c.
M. H. HUNT, Bell Branch, Mich.

CINCINNATI.

HONEY.—Extracted honey brings 31-2@7c.; comb honey, 12 to 14c. for good to choice, in the jobbing way.

BEESWAX.—It is in good demand and arrivals are fair. We pay 20c. for good yellow.
C. F. MUTH & SON, Freeman & Central Ave.

CLEVELAND.

HONEY.—Choice new honey in 1-lb. sections is selling at 14c.; 2-lbs. 12@13c. Old honey is very dull at 10@12c. Extracted, 6@7c.

BEESWAX.—25c.
A. C. KENDEL, 115 Ontario Street.

KANSAS CITY.

HONEY.—The market is good for all grades, and sales are large, while the supply is the same. Prices remain the same. One-pound sections, white clover, 13@14c.; dark 1-lb., 11@12c.; 2-lbs., 11@12c.; dark 2-lbs., 9@10c.; ¼-lb., light, 14@15c. Extracted white clover, 6@7c.; dark, 4@5c.; white sage, 5@5½c.

BEESWAX.—20@22c.
CLEMONS, CLOON & Co., cor. 4th & Walnut.

MILWAUKEE.

HONEY.—We quote as follows: Choice comb in 1-lb. sections, 12@13c.; 2-lbs., 11@12½c.; dark not wanted. Extracted, white, in kegs, 6@6½c.; same in tin cans, 6 1-2@7c.; dark in barrels and half-barrels, 5@5½c. 1-2 cts.

BEESWAX.—No demand.
A. V. BISHOP, 142 W. Water St.

SAN FRANCISCO.

HONEY.—We now quote 7@10c., as to quality wholesale.

BEESWAX.—It is dull, but buyers have to pay 22@23c. for choice lots.
SCHACHT & LEMCKE, 122-124 Davis St.

HONEY.—Receipts are light and the market is very quiet. We quote: White extracted, 4@4½c.; amber, 3½c. Comb, 5½@10c. for white.

BEESWAX.—19@22c.
O. B. SMITH & Co., 423 Front Street.

ST. LOUIS.

HONEY.—Choice comb, 10@12½c.; latter price is for choice white clover. Strained, in barrels, 3¼@4c. Extra fancy of bright color and in No. 1 packages, ¼ advance on above prices. Extracted in barrels, 4@5½c.; in cans 6@7c.

BEESWAX.—Firm at 22c. for prime.
D. G. TUTT & CO., Commercial St.

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The Western World Guide and Hand-Book of Useful Information, contains the greatest amount of useful information ever put together in such a cheap form. The printing, paper, and binding are excellent, and the book is well worth a dollar. To any one sending us two new subscribers besides his own, with \$3.00, for one year, we will present a copy of this valuable book.

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WANTED—A Swiss Bee-Keeper desires to obtain a situation to take charge of an apiary either now or in the spring. He speaks German, and can give good references as to integrity and ability. Address, **ANTON BATTAGLIA**, 39A1t 18 Sherman St., CHICAGO, ILL.

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THE October number of the *American Apiculturist* will contain essays on "Wintering Bees," from the pens of **James Heddon, G. M. Doolittle, A. E. Manum, Prof. Cook, Dr. Tinker, J. E. Fond, C. W. Dayton, P. B. Russell, G. W. Demaree**, and other equally prominent apiculturists. Every bee-keeper should secure a copy. For ten cents in stamps this number will be mailed to any address on and after Sept. 25. No specimen copies of this number will be sent out. Regular subscription price \$1.00 per year. Specimen copies (of back numbers) will be sent free. Address, 33A6t **AMERICAN APICULTURIST**, WENHAM, MASS.

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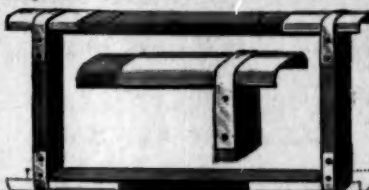
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Sample Corners, for 1 frame 5 cts.; for 10, 35 cts.; for 25, 75 cts. All Corners made 1/4-inch unless otherwise ordered. **F. M. JOHNSON**, WASHINGTON DEPOT, Litchfield Co., CONN. 32A1t

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